

ABSTRACT OF THE DISCLOSURE

Disclosed is a method for performing fast distributed sample acquisition (DSA). A spreader generates a data signal by spreading an incoming data stream over a range of spectrum according to a locally generated first main sequence, and samples the state sample of the main sequence. A sample spreader outputs a first state signal by spreading a symbol according to a locally generated first subsequence. A sample despreader reconstructs the transmitted binary orthogonal symbols by despreading the first state signal obtained from the sample spreader according to a locally generated second subsequence to detect the first main sequence state sample. A despreader compares the state sample obtained from the sample despreader with a locally generated state sample and makes correction on a local SRG to generate a second main sequence having new state. An incoming data stream is reconstructed by despreading the data signal obtained from the spreader according to the second main sequence.